

**What is claimed is:**

- 5        1.     A CMOS active pixel sensor (APS) transducer array for sensing an image by  
providing output signals from selected APS's comprising:
  - a number of APS's arranged in columns and rows;
  - power terminal means adapted to be connected to a power supply;
  - 10       -        ground terminal means adapted to be connected to ground;
  - means for connecting the selected APS's to the power terminal means  
and the ground terminal means.
- 15       2.     A transducer array as claimed in claim 1 wherein the connecting means  
comprises:
  - switch means for connecting the selected APS's to the power terminal  
means; and
  - coupling means for connecting the APS's to the ground terminal  
20       means.
- 25       3.     A transducer array as claimed in claim 2 wherein the selected APS's are  
located in an array column.
- 25       4.     A transducer array as claimed in claim 2 wherein the selected APS's are  
located in an array row.
- 30       5.     A transducer array as claimed in claim 2 wherein the selected APS's are  
located in columns and rows of the array.
- 30       6.     A transducer array as claimed in claim 2 wherein the selected APS's comprise  
all of the APS's located in selected array columns.
- 35       7.     A transducer array as claimed in claim 2 wherein the selected APS's comprise  
all of the APS's located in selected array rows.



- 5
15. A transducer array as claimed in claim 14 wherein the further coupling means comprises M transistor means wherein each of the M transistor means is connected between APS's in a respective row and the ground terminal.
16. A transducer array as claimed in claim 15 comprising control means coupled to the transistor means for selectively activating and deactivating the transistor means.
- 10 17. A CMOS active pixel sensor (APS) transducer array for sensing an image by providing output signals from the APS's comprising:
- a number of APS's arranged in N columns and M rows;
  - a power terminal adapted to be connected to a power supply;
  - 15 - a ground terminal adapted to be connected to a ground;
  - means for coupling the APS's between the power terminal and the ground terminal comprising:
    - N transistor means wherein each of the N transistor means is connected between APS's in a respective column and the
    - 20 ground terminal; and
    - further coupling means for coupling the APS's to the power terminal.
18. A transducer array as claimed in claim 17 wherein the further coupling means comprises M transistor means wherein each of the M transistor means is connected between APS's in a respective row and the power terminal.
- 25 19. A transducer array as claimed in claim 18 comprising control means coupled to the transistor means for selectively activating and deactivating the transistor means.
- 30 20. A CMOS active pixel sensor (APS) transducer array for sensing an image by providing output signals from the APS's comprising:
- 35 a. a number of APS's arranged in N columns and M rows;
  - b. a power terminal adapted to be connected to a power supply;

- c. a ground terminal adapted to be connected to a ground;
- d. means for coupling the APS's between the power terminal and the ground terminal comprising:
  - M transistor means wherein each of the M transistor means is connected between APS's in a respective row and the power terminal; and
  - further coupling means for coupling the APS's to the ground terminal.

21. A transducer array as claimed in claim 20 comprising control means coupled to the transistor means for selectively activating and deactivating the transistor means.

22. A CMOS active pixel sensor (APS) transducer array for sensing an image by providing output signals from the APS's comprising:

- a. a number of APS's arranged in N columns and M rows;
- b. a power terminal adapted to be connected to a power supply;
- c. a ground terminal adapted to be connected to a ground;
- d. means for coupling the APS's between the power terminal and the ground terminal comprising:
  - M transistor means wherein each of the M transistor means is connected between APS's in a respective row and the ground terminal; and
  - further coupling means for coupling the APS's to the power terminal.

23. A transducer array as claimed in claim 20 comprising control means coupled to the transistor means for selectively activating and deactivating the transistor means.

24. In a CMOS active pixel sensor (APS) transducer array having a number of APS's arranged in columns and rows and connected to a power supply, for providing output signals representing an image and wherein the outputs of selected APS's are decimated to reduce the output bandwidth of the transducer, a method of controlling power consumption in the array

